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His Gln Val Phe Leu Asp Met Ala Val Leu Val Glu Ser Gln Gly Ala
225 230 235 240

Gln Leu Asp Asp Ile Glu Ser Gln Val Asn Arg Ala Asn Ser Phe Val
245 250 255

Arg Gly Gly Ala Gln Gln Leu Gln Val Ala Arg Lys His Gln Lys Asn
260 265 270

Thr Arg Lys Trp Thr Cys Phe Ala Ile Ile Leu Leu Leu Ile Ile Ile
275 280 285

Leu Val Val Val Leu Ser Ile Gln Pro Trp Lys Lys
290 295 300

<210> 3
<211> 1334
<212> DNA
<213> Arabidopsis thaliana

<220>
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Met Asn Asp Leu Phe Ser Ser Ser Phe Ser Arg Phe
1 5 10

cgc agc gga gaa cca tcc cct cgc cga gac gtt gcc ggc ggt ggc gac 160
Arg Ser Gly Glu Pro Ser Pro Arg Arg Asp Val Ala Gly Gly Asp
15 20 25

gga gtt cag atg gcg aat ccc gcg gga tca acc ggt ggt gtg aac ctc 208
Gly Val Gln Met Ala Asn Pro Ala Gly Ser Thr Gly Gly Val Asn Leu
30 35 40

gac aag ttc ttc gaa gat gtt gaa tct gtg aaa gaa gag cta aag gag 256
Asp Lys Phe Phe Glu Asp Val Glu Ser Val Lys Glu Glu Leu Lys Glu
45 50 55 60

cta gat cgg ctc aac gaa aca ctc tct tca tgt cac gag cag agc aag 304
Leu Asp Arg Leu Asn Glu Thr Leu Ser Ser Cys His Glu Gln Ser Lys
65 70 75

acg ctt cac aat gct aaa gcc gtt aaa gat ctc cgg tct aaa atg gac 352
Thr Leu His Asn Ala Lys Ala Val Lys Asp Leu Arg Ser Lys Met Asp
80 85 90

ggt gac gtt gga gtc gcg ttg aag aag gcg aag atg att aaa gtt aaa 400
Gly Asp Val Gly Val Ala Leu Lys Ala Lys Met Ile Lys Val Lys

95	100	105	
ctc gag gcg cta gat cgt gcc aat gct gct aat cgg agt ctc cct ggc Leu Glu Ala Leu Asp Arg Ala Asn Ala Ala Asn Arg Ser Leu Pro Gly 110	115	120	448
tgt gga cct ggt tct tcc tcc gat cga acc agg acc tct gtc ctc aat Cys Gly Pro Gly Ser Ser Asp Arg Thr Arg Thr Ser Val Leu Asn 125	130	135	496
ggt ctc agg aag aaa ttg atg gac tct atg gat agt ttc aac cga ttg Gly Leu Arg Lys Lys Leu Met Asp Ser Met Asp Ser Phe Asn Arg Leu 145	150	155	544
agg gag ctt atc tcg tcc gag tat aga gaa act gta cag agg agg tac Arg Glu Leu Ile Ser Ser Glu Tyr Arg Glu Thr Val Gln Arg Arg Tyr 160	165	170	592
ttc acc gtc acc ggc gag aat ccg gat gaa cga acc cta gat cga ctg Phe Thr Val Thr Gly Glu Asn Pro Asp Glu Arg Thr Leu Asp Arg Leu 175	180	185	640
att tcc act gga gag agt gag aga ttc ttg cag aaa gca ata caa gaa Ile Ser Thr Gly Glu Ser Glu Arg Phe Leu Gln Lys Ala Ile Gln Glu 190	195	200	688
caa gga aga gga agg gtg tta gac acc att aac gag att caa gaa agg Gln Gly Arg Gly Arg Val Leu Asp Thr Ile Asn Glu Ile Gln Glu Arg 205	210	215	736
cat gat cgc gtt aaa gac att gag aag aat ctc agg gag ctt cac cag His Asp Arg Val Lys Asp Ile Glu Lys Asn Leu Arg Glu Leu His Gln 225	230	235	784
gtg ttt cta gac atg gcc gtg ctg gta gag cac cag gga gct cag ctt Val Phe Leu Asp Met Ala Val Leu Val Glu His Gln Gly Ala Gln Leu 240	245	250	832
gat gac atc gag agt cat gtg ggt cga gct agc tcc ttt atc aga ggc Asp Asp Ile Glu Ser His Val Gly Arg Ala Ser Ser Phe Ile Arg Gly 255	260	265	880
gga act gac cag cta caa acc gct cgg gtt tac cag aag aac acg cga Gly Thr Asp Gln Leu Gln Thr Ala Arg Val Tyr Gln Lys Asn Thr Arg 270	275	280	928
aaa tgg aca tgt att gcc att att ctc atc atc atc ata act gtt Lys Trp Thr Cys Ile Ala Ile Ile Leu Ile Ile Ile Ile Thr Val 285	290	295	976
gtg gtt ctt gct gtt taaaaaccgt ggaacaacag cagtggcgcc ggcggcggtg Val Val Leu Ala Val 305			1031
gtgggtgggg gggttaccact ggaggaagtc aaccaaattc agggacacca ccaaattcctc ctcaggcaag gcgtctattt cggttgaagg gaagttgaag tttagtttcg ttatattcat atatattctt tctttgaaaa accttattat caaaccagct ttgtgttact actttctact			1091
			1151
			1211

gctggtttgc	tgttaatctc	ccgtttattt	ggttttgtg	aaagaattta	aatgtgggt	1271
tagatgagaa	aattagtaca	acattctctt	gtatctatgt	ttgctaccct	gacgttagctc	1331
gag						1334

<210> 4
<211> 305
<212> PRT
<213> Arabidopsis thaliana

<400> 4

Met Asn Asp Leu Phe Ser Ser Ser Phe Ser Arg Phe Arg Ser Gly Glu						
1	5	10	15			

Pro Ser Pro Arg Arg Asp Val Ala Gly Gly Gly Asp Gly Val Gln Met						
20	25	30				

Ala Asn Pro Ala Gly Ser Thr Gly Gly Val Asn Leu Asp Lys Phe Phe						
35	40	45				

Glu Asp Val Glu Ser Val Lys Glu Glu Leu Lys Glu Leu Asp Arg Leu						
50	55	60				

Asn Glu Thr Leu Ser Ser Cys His Glu Gln Ser Lys Thr Leu His Asn						
65	70	75	80			

Ala Lys Ala Val Lys Asp Leu Arg Ser Lys Met Asp Gly Asp Val Gly						
85	90	95				

Val Ala Leu Lys Lys Ala Lys Met Ile Lys Val Lys Leu Glu Ala Leu						
100	105	110				

Asp Arg Ala Asn Ala Ala Asn Arg Ser Leu Pro Gly Cys Gly Pro Gly						
115	120	125				

Ser Ser Ser Asp Arg Thr Arg Thr Ser Val Leu Asn Gly Leu Arg Lys						
130	135	140				

Lys Leu Met Asp Ser Met Asp Ser Phe Asn Arg Leu Arg Glu Leu Ile						
145	150	155	160			

Ser Ser Glu Tyr Arg Glu Thr Val Gln Arg Arg Tyr Phe Thr Val Thr						
165	170	175				

Gly Glu Asn Pro Asp Glu Arg Thr Leu Asp Arg Leu Ile Ser Thr Gly
 180 185 190

Glu Ser Glu Arg Phe Leu Gln Lys Ala Ile Gln Glu Gln Gly Arg Gly
 195 200 205

Arg Val Leu Asp Thr Ile Asn Glu Ile Gln Glu Arg His Asp Arg Val
 210 215 220

Lys Asp Ile Glu Lys Asn Leu Arg Glu Leu His Gln Val Phe Leu Asp
 225 230 235 240

Met Ala Val Leu Val Glu His Gln Gly Ala Gln Leu Asp Asp Ile Glu
 245 250 255

Ser His Val Gly Arg Ala Ser Ser Phe Ile Arg Gly Gly Thr Asp Gln
 260 265 270

Leu Gln Thr Ala Arg Val Tyr Gln Lys Asn Thr Arg Lys Trp Thr Cys
 275 280 285

Ile Ala Ile Ile Ile Leu Ile Ile Ile Ile Thr Val Val Val Leu Ala
 290 295 300

Val
 305

<210> 5
 <211> 1205
 <212> DNA
 <213> Nicotiana tabacum

<400> 5		
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taatatgaga tttatgtcgt tattaatgtt tttctcttga gggttcataa agagatttat		120
cgtgtacctg gggtaggtc aatgagaag gggtaatt ttttttttt ttttaggttt		180
tattgtgttt tattattcgt accgattttt ttatttata tttttaaatc ttataagttt		240
tgttaacttcc ccaggtggtc ttctggaaac tggtatctgt ttaagagtaa aaaaggtacc		300
gacttatctt tcttgggtt gttttacta ctattcgct tcttattatc gttttgttca		360
ggtaaaagat cacaagaaga ccacgaaggaa acggtaacg tcaacgactc gtgggggaga		420
ttgcttcctt aatcggata agtgaaccca gagttatagt agttcaactc gaggaactga		480
aagttggttt tgtcgtaca gttcttatg aactacgtta agaaagttt aggagaggtt		540

aaggaagtgt cgaagtacgg aaagaactta aaggattga cataggtgt gaacaggaga 600
 gggAACGAGA acttaacgga aaacgttctt gcagagtcaa actggacatc tatactcaca 660
 tagttcttga cgaagtagtc ctaaaagagg acactgccat attatagcag caacttgaca 720
 aagggtata agtctacggt agaaaacgga atcgagcaac ttgactaagt aactgagaac 780
 ttcaaagaag gaattaggca agtgttgact tcaagagcag gacagtctac ttgaaggccc 840
 aggtgttaggt ccctccgaag ctaagcgacg taaactagac agattccgaa gctctgctt 900
 aaactactta aaccgaaaga agttacggta ccttgcagt aataggtaca acctagaatc 960
 tagaaattgc cgaaatcgca acacttctca gaacgaaaaa agtacccttc taacctcaac 1020
 ccttatctaa aagagctccg gaaactcaag cagaaattac cgaagttgta gaagcttctt 1080
 aaacagctct aactgaggcg gtcattacag agggtaaaga taccgcactc tcaggctaac 1140
 tagcagtcga gactttgctc tctttcttagg acttttatct agtaagtaaa actctaccct 1200
 aaacc 1205

<210> 6
 <211> 80
 <212> PRT
 <213> Nicotiana tabacum

<400> 6

Ser Asn Pro Glu Glu Lys Glu Phe Leu Asp Trp Ser Lys Arg Val Ile
 1 5 10 . 15

Ile Ile Glu Gly Ile Gly Arg Gly Leu Leu Tyr Leu His Arg Asp Ser
 20 25 30

Arg Leu Arg Ile Ile His Arg Asp Leu Lys Ala Ser Asn Ile Leu Leu
 35 40 45

Asp Glu Gln Leu Asn Pro Lys Ile Ser Asp Phe Gly Met Ala Arg Ile
 50 55 60

Phe Pro Gly Ser Gln Asp Gln Ala Asn Thr Glu Arg Val Val Gly Thr
 65 70 75 80

<210> 7
 <211> 77
 <212> PRT
 <213> Ipomoea trifida

<400> 7

Asn Lys Gln Arg Ser Ser Leu Leu Asn Trp Gln Thr Arg Phe Asn Ile
 1 5 10 15

Ile Cys Gly Ile Ala Arg Gly Leu Leu Tyr Leu His Gln Asp Ser Arg

20

25

30

Phe Arg Ile Ile His Arg Asp Leu Lys Ala Ser Asn Ile Leu Leu Asp
 35 40 45

Lys Glu Met Asn Pro Lys Ile Ser Asp Phe Gly Met Ala Arg Ile Phe
 50 55 60

Gly Gly Asp Glu Thr Asp Ala Asn Asn Thr Lys Arg Val
 65 70 75

<210> 8
<211> 72
<212> PRT
<213> brassica campestris

<400> 8

Leu Asn Trp Lys Asp Arg Phe Ala Ile Thr Asn Gly Val Ala Arg Gly
 1 5 10 15

Leu Leu Tyr Leu His Gln Asp Ser Arg Phe Arg Ile Ile His Arg Asp
 20 25 30

Leu Lys Pro Gly Asn Ile Leu Leu Asp Lys Tyr Met Ile Pro Lys Ile
 35 40 45

Ser Asp Phe Gly Met Ala Arg Ile Phe Ala Arg Asp Glu Ile Gln Ala
 50 55 60

Arg Thr Asp Asn Ala Val Gly Thr
 65 70

<210> 9
<211> 72
<212> PRT
<213> Brassica oleracea

<400> 9

Lys Lys Arg Ser Ser Asn Leu Asn Trp Lys Asp Arg Phe Ala Ile Ile
 1 5 10 15

Asn Gly Val Ala Arg Gly Leu Leu Tyr Leu His Gln Asp Ser Arg Phe
 20 25 30

Arg Ile Ile His Arg Asp Met Lys Pro Ser Asn Ile Leu Leu Asp Lys
 35 40 45

Tyr Met Ile Pro Lys Ile Ser Asp Phe Gly Met Ala Arg Ile Phe Ala
 50 55 60

Arg Asp Glu Thr Glu Ala Asn Thr
 65 70

<210> 10
<211> 66
<212> PRT
<213> Nicotiana tabacum

<400> 10

Gly Leu Leu Cys Val Gln Glu Tyr Ala Glu Asp Arg Pro Asn Val Ser
 1 5 10 15

Val Val Leu Ser Met Leu Thr Ser Glu Ile Ser Asp Leu Pro Ser Pro
 20 25 30

Lys Gln Pro Ala Phe Thr Thr Arg Pro Ser Cys Ser Glu Lys Glu Ser
 35 40 45

Ser Lys Thr Gln Gly Ser Val Asn Thr Val Ser Ile Thr Ile Met Glu
 50 55 60

Gly Arg
 65

<210> 11
 <211> 70
 <212> PRT
 <213> Ipomoea trifida

<400> 11

Gly Leu Leu Cys Val Gln Glu Gln Ala Glu Asp Arg Pro Asn Met Ala
 1 5 10 15

Thr Val Val Leu Met Leu Gly Ser Glu Ser Ala Thr Leu Pro Gln Pro
 20 25 30

Lys His Pro Gly Phe Cys Leu Gly Ser Arg Pro Ala Asp Met Asp Ser
 35 40 45

Ser Thr Ser Asn Cys Asp Glu Ser Cys Thr Val Asn Gln Val Thr Val
 50 55 60

Thr Met Leu Asp Gly Arg
 65 70

<210> 12
 <211> 73
 <212> PRT
 <213> brassica campestris

<400> 12

Gly Leu Leu Cys Ile Gln Glu Arg Ala Glu His Arg Pro Thr Met Ser
 1 5 10 15

Ser Val Val Trp Met Leu Gly Ser Glu Ala Thr Glu Ile Pro Gln Pro
 20 25 30

Lys Pro Pro Val Tyr Cys Leu Ile Ala Ser Tyr Tyr Ala Asn Asn Pro
 35 40 45

Ser Ser Ser Arg Gln Phe Asp Asp Asp Glu Ser Trp Thr Val Asp Lys
 50 55 60

Tyr Thr Trp Ser Val Ile Asp Ala Arg
65 70

<210> 13
<211> 73
<212> PRT
<213> Brassica oleracea

<400> 13

Gly Leu Leu Cys Ile Gln Glu Arg Ala Glu Asp Arg Pro Thr Met Ser
1 5 10 15

Ser Val Val Trp Met Leu Gly Ser Glu Ala Thr Asp Ile Pro Gln Pro
20 25 30

Lys Pro Pro Ile Tyr Cys Leu Ile Thr Ser Tyr Tyr Ala Asn Asn Pro
35 40 45

Ser Ser Ser Arg Gln Phe Glu Asp Asp Glu Ser Trp Thr Val Asn Lys
50 55 60

Tyr Thr Cys Ser Val Ile Asp Ala Arg
65 70

<210> 14
<211> 124
<212> PRT
<213> Nicotiana tabacum

<400> 14

Arg Phe Arg Ala Val Thr Ser Ala Tyr Tyr Arg Ser Ala Val Gly Ala
1 5 10 15

Leu Leu Val Tyr Asp Ile Ser Arg Lys Thr Thr Phe Glu Asn Ile Gln
20 25 30

Cys Trp Leu Asp Glu Leu His Thr His Cys Asp Thr Thr Val Ala Arg
35 40 45

Met Leu Val Gly Asn Lys Cys Asp Leu Glu Asn Ile Arg Asp Val Ser
50 55 60

Ile Tyr Glu Gly Lys Asn Leu Ala Glu Glu Gly Leu Phe Phe Ile
65 70 75 80

Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Lys Gln Pro Leu Lys Leu
85 90 95

Ser Ser Ala Gln Ile Tyr Gln Asn Leu Ser Arg Lys Val Leu His Ser
100 105 110

Asp Ser Tyr Lys Thr Glu Leu Ser Val His Pro Val
115 120

<210> 15
<211> 124
<212> PRT

<213> Glycine max

<400> 15

Arg Phe Arg Ala Val Thr Ser Ala Tyr Tyr Arg Gly Ala Val Gly Ala
1 5 10 15

Leu Ile Val Tyr Asp Ile Ser Arg Arg Thr Thr Phe Asp Ser Val Gly
20 25 30

Arg Trp Leu Asp Glu Leu Lys Thr His Cys Asp Thr Thr Val Ala Met
35 40 45

Met Leu Val Gly Asn Lys Cys Asp Leu Glu Asn Ile Arg Ala Val Ser
50 55 60

Ile Asp Glu Gly Lys Ser Leu Ala Glu Ala Glu Gly Leu Phe Phe Met
65 70 75 80

Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Lys Met Ala Phe Glu Met
85 90 95

Val Ile Arg Glu Ile Tyr Asn Asn Val Ser Arg Lys Val Leu Asn Ser
100 105 110

Glu Thr Tyr Lys Ala Glu Leu Ser Val Asn Arg Val
115 120

<210> 16

<211> 124

<212> PRT

<213> Lotus japonicus

<400> 16

Arg Phe Arg Ala Val Thr Ser Ala Tyr Tyr Arg Gly Ala Val Gly Ala
1 5 10 15

Leu Ile Val Tyr Asp Ile Thr Arg Arg Thr Thr Phe Asp Ser Val Ser
20 25 30

Arg Trp Leu Asp Glu Leu Lys Thr His Cys Asp Thr Thr Val Ala Met
35 40 45

Met Leu Val Gly Asn Lys Cys Asp Leu Glu Asn Ile Arg Ala Val Ser
50 55 60

Ile Glu Glu Gly Lys Ser Leu Ala Glu Ala Gln Gly Leu Phe Phe Met
65 70 75 80

Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Arg Thr Ala Phe Glu Met
85 90 95

Val Ile Arg Glu Ile Tyr Asn Asn Val Ser Arg Lys Val Leu Asn Ser
100 105 110

Asp Thr Tyr Lys Ala Glu Leu Ser Val Asp Arg Val
115 120

<210> 17
 <211> 124
 <212> PRT
 <213> Arabidopsis thaliana

 <400> 17

 Arg Phe Arg Ala Val Thr Ser Ala Tyr Tyr Arg Gly Ala Val Gly Ala
 1 5 10 15

 Leu Val Val Tyr Asp Ile Thr Arg Arg Thr Thr Phe Glu Ser Val Gly
 20 25 30

 Arg Trp Leu Asp Glu Leu Lys Ile His Ser Asp Thr Thr Val Ala Arg
 35 40 45

 Met Leu Val Gly Asn Lys Cys Asp Leu Glu Asn Ile Arg Ala Val Ser
 50 55 60

 Val Glu Glu Gly Lys Ala Leu Ala Glu Glu Gly Leu Phe Phe Val
 65 70 75 80

 Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Lys Thr Ala Phe Glu Met
 85 90 95

 Val Ile Leu Asp Ile Tyr Asn Asn Val Ser Arg Lys Gln Leu Asn Ser
 100 105 110

 Asp Thr Tyr Lys Asp Glu Leu Thr Val Asn Arg Val
 115 120

 <210> 18
 <211> 124
 <212> PRT
 <213> Arabidopsis thaliana

 <400> 18

 Arg Phe Arg Ala Val Thr Ser Ala Tyr Tyr Arg Gly Ala Val Gly Ala
 1 5 10 15

 Leu Val Val Tyr Asp Ile Thr Arg Ser Ser Thr Phe Glu Asn Val Gly
 20 25 30

 Arg Trp Leu Asp Glu Leu Asn Thr His Ser Asp Thr Thr Val Ala Lys
 35 40 45

 Met Leu Ile Gly Asn Lys Cys Asp Leu Glu Ser Ile Arg Ala Val Ser
 50 55 60

 Val Glu Glu Gly Lys Ser Leu Ala Glu Ser Glu Gly Leu Phe Phe Met
 65 70 75 80

 Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Lys Thr Ala Phe Glu Met
 85 90 95

 Val Ile Arg Glu Ile Tyr Ser Asn Ile Ser Arg Lys Gln Leu Asn Ser
 100 105 110

Asp Ser Tyr Lys Glu Glu Leu Thr Val Asn Arg Val
 115 120

<210> 19
 <211> 124
 <212> PRT
 <213> Nicotiana tabacum

<400> 19

Arg Phe Arg Ala Val Thr Ser Ala Tyr Tyr Arg Gly Ala Phe Gly Ala
 1 5 10 15

Leu Val Val Tyr Asp Ile Thr Arg Arg Thr Thr Phe Asp Ser Ile Pro
 20 25 30

Arg Trp Leu Asp Glu Leu Lys Thr His Ser Asp Thr Thr Val Ala Arg
 35 40 45

Met Leu Val Gly Asn Lys Cys Asp Leu Asp Asn Ile Arg Ala Val Ser
 50 55 60

Val Glu Glu Gly Lys Ser Leu Ala Glu Ser Glu Gly Met Phe Phe Met
 65 70 75 80

Glu Thr Ser Ala Leu Asp Ala Thr Asn Val Asn Lys Ala Phe Asp Met
 85 90 95

Val Ile Arg Glu Ile Tyr Asn Ser Val Ser Arg Lys Val Leu Asn Ser
 100 105 110

Asp Ser Tyr Lys Ala Glu Leu Ser Val Asn Arg Val
 115 120

<210> 20
 <211> 168
 <212> PRT
 <213> Nicotiana tabacum

<400> 20

Leu Ile Phe Ser Leu Glu Thr Phe Leu Leu Val Leu Phe Phe Thr
 1 5 10 15

Leu Val Ser Ser Ser Ala Ser Glu Ile Phe Phe Glu Glu Ser Phe Asp
 20 25 30

Asp Gly Trp Arg Ser Arg Trp Val Lys Ser Asp Trp Lys Ile Ser Glu
 35 40 45

Gly Lys Ala Gly Ser Phe Lys His Thr Ala Gly Thr Trp Ala Gly Asp
 50 55 60

Pro Asp Asp Lys Gly Ile His Thr Thr Asn Asp Ala Lys His Phe Ala
 65 70 75 80

Val Ser Ala Lys Ile Pro Glu Phe Ser Asn Lys Asn Arg Thr Leu Val
 85 90 95

Val Gln Tyr Ser Ile Lys Phe Glu Pro Asp Ile Glu Cys Gly Arg Gly
 100 105 110

Tyr Ile Lys Leu Leu Ser Gly Tyr Val His Pro Lys Lys Phe Gly Gly
 115 120 125

Asp Thr Pro Tyr Ser Phe Met Phe Gly Ala Asp Ile Cys Gly Ser Gln
 130 135 140

Thr Lys Lys Pro Ser Cys Leu Tyr Phe Pro Tyr Pro Gly Ala Glu Leu
 145 150 155 160

Pro Pro Leu Pro Glu Arg Asn Leu
 165

<210> 21

<211> 165

<212> PRT

<213> Arabidopsis thaliana

<400> 21

Asn Lys Leu Ser Phe Phe Cys Phe Phe Phe Leu Val Ser Val Leu Thr
 1 5 10 15

Leu Ala Pro Leu Ala Phe Ser Glu Ile Phe Leu Glu Glu His Phe Glu
 20 25 30

Gly Gly Trp Lys Ser Arg Trp Val Leu Ser Asp Trp Lys Arg Asn Glu
 35 40 45

Gly Lys Ala Gly Thr Phe Lys His Thr Ala Gly Lys Trp Pro Gly Asp
 50 55 60

Pro Asp Asn Lys Gly Ile Gln Thr Tyr Asn Asp Ala Lys His Tyr Ala
 65 70 75 80

Ile Ser Ala Lys Ile Pro Glu Phe Ser Asn Lys Asn Arg Thr Leu Val
 85 90 95

Val Gln Tyr Ser Val Lys Ile Glu Gln Asp Ile Glu Cys Gly Gly Ala
 100 105 110

Tyr Ile Lys Leu Leu Ser Gly Tyr Val Asn Gln Lys Gln Phe Gly Gly
 115 120 125

Asp Thr Pro Tyr Ser Leu Met Phe Gly Pro Asp Ile Cys Gly Thr Gln
 130 135 140

Thr Lys Lys Leu His Val Ile Val Ser Tyr Gln Gly Gln Asn Tyr Pro
 145 150 155 160

Ile Lys Lys Asp Leu
 165

<210> 22

<211> 82

<212> PRT

<213> Nicotiana tabacum

<400> 22

Gly Val Trp Met Glu Pro Asp Tyr Ala Lys Thr Ser Asp Ser Arg Lys
 1 5 10 15

Cys Leu Pro Ile Gly Glu Ala Glu Lys Glu Ala Phe Glu Glu Ala Glu
 20 25 30

Lys Val Arg Lys Ala Lys Glu Glu Glu Ala Gln Arg Ala Arg Glu
 35 40 45

Glu Gly Glu Arg Arg Lys Arg Glu Arg Gly Arg Asp Arg His Arg Asp
 50 55 60

Arg Tyr Lys Lys Arg Tyr His His Asp Tyr Met Asp Asp Tyr His Asp
 65 70 75 80

Glu Leu

<210> 23

<211> 85

<212> PRT

<213> Arabidopsis thaliana

<400> 23

Ile Leu Ile Cys Asp Asp Pro Ala Tyr Ala Arg Ser Ile Val Asp Asp
 1 5 10 15

Tyr Phe Ala Gln His Arg Glu Ser Glu Lys Glu Leu Phe Ala Glu Ala
 20 25 30

Glu Lys Glu Arg Lys Ala Arg Glu Asp Glu Glu Ala Arg Ile Ala Arg
 35 40 45

Glu Glu Gly Glu Arg Arg Lys Glu Arg Asp His Arg Tyr Gly Asp
 50 55 60

Arg Arg Arg Arg Tyr Lys Arg Pro Asn Pro Arg Asp Tyr Met Asp Asp
 65 70 75 80

Tyr His Asp Glu Leu
 85

<210> 24

<211> 310

<212> PRT

<213> Arabidopsis thaliana

<400> 24

Met Asn Asp Leu Met Thr Lys Ser Phe Met Ser Tyr Val Asp Leu Lys
 1 5 10 15

Lys Ala Ala Met Lys Asp Met Glu Ala Gly Pro Asp Phe Asp Leu Glu
 20 25 30

Met Ala Ser Thr Lys Ala Asp Lys Met Asp Glu Asn Leu Ser Ser Phe
 35 40 45
 Leu Glu Glu Ala Glu Tyr Val Lys Ala Glu Met Gly Leu Ile Ser Glu
 50 55 60
 Thr Leu Ala Arg Ile Glu Gln Tyr His Glu Glu Ser Lys Gly Val His
 65 70 75 80
 Lys Ala Glu Ser Val Lys Ser Leu Arg Asn Lys Ile Ser Asn Glu Ile
 85 90 95
 Val Ser Gly Leu Arg Lys Ala Lys Ser Ile Lys Ser Lys Leu Glu Glu
 100 105 110
 Met Asp Lys Ala Asn Lys Glu Ile Lys Arg Leu Ser Gly Thr Pro Val
 115 120 125
 Tyr Arg Ser Arg Thr Ala Val Thr Asn Gly Leu Arg Lys Lys Leu Lys
 130 135 140
 Glu Val Met Met Glu Phe Gln Gly Leu Arg Gln Lys Met Met Ser Glu
 145 150 155 160
 Tyr Lys Glu Thr Val Glu Arg Arg Tyr Phe Thr Val Thr Gly Glu His
 165 170 175
 Ala Asn Asp Glu Met Ile Glu Lys Ile Ile Thr Asp Asn Ala Gly Gly
 180 185 190
 Glu Glu Phe Leu Thr Arg Ala Ile Gln Glu His Gly Lys Gly Lys Val
 195 200 205
 Leu Glu Thr Val Val Glu Ile Gln Asp Arg Tyr Asp Ala Ala Lys Glu
 210 215 220
 Ile Glu Lys Ser Leu Leu Glu Leu His Gln Val Phe Leu Asp Met Ala
 225 230 235 240
 Val Met Val Glu Ser Gln Gly Glu Gln Met Asp Glu Ile Glu His His
 245 250 255
 Val Ile Asn Ala Ser His Tyr Val Ala Asp Gly Ala Asn Glu Leu Lys
 260 265 270
 Thr Ala Lys Ser His Gln Arg Asn Ser Arg Lys Trp Met Cys Ile Gly
 275 280 285
 Ile Ile Val Leu Leu Ile Ile Leu Ile Val Val Ile Pro Ile Ile
 290 295 300
 Thr Ser Phe Ser Ser Ser
 305 310
 <210> 25
 <211> 259
 <212> PRT
 <213> Homo sapiens

<400> 25

Met Asp Glu Phe Phe Glu Gln Val Glu Glu Ile Arg Gly Phe Ile Asp
 1 5 10 15

Lys Ile Ala Glu Asn Val Glu Glu Val Lys Arg Lys His Ser Ala Ile
 20 25 30

Leu Ala Ser Pro Asn Pro Asp Glu Lys Thr Lys Val Glu Leu Glu Glu
 35 40 45

Leu Met Ser Asp Ile Lys Lys Thr Ala Asn Lys Val Arg Ser Lys Leu
 50 55 60

Lys Ser Ile Glu Gln Ser Ile Glu Gln Glu Glu Gly Leu Asn Arg Ser
 65 70 75 80

Ser Ala Asp Leu Arg Ile Arg Lys Thr Gln His Ser Thr Leu Ser Arg
 85 90 95

Lys Phe Val Glu Val Met Ser Glu Tyr Asn Ala Thr Gln Ser Val Tyr
 100 105 110

Arg Glu Arg Cys Lys Gly Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly
 115 120 125

Arg Thr Thr Thr Ser Glu Glu Leu Glu Asp Met Leu Glu Ser Gly Asn
 130 135 140

Pro Ala Ile Phe Ala Ser Gly Ile Ile Met Asp Ser Ser Ile Ser Lys
 145 150 155 160

Gln Ala Leu Ser Glu Ile Glu Thr Arg His Ser Glu Ile Ile Lys Leu
 165 170 175

Glu Asn Ser Ile Arg Glu Leu His Asp Met Phe Met Asp Met Ala Met
 180 185 190

Leu Val Glu Ser Gln Gly Glu Met Ile Asp Arg Ile Glu Tyr Asn Val
 195 200 205

Glu His Ala Val Asp Tyr Val Glu Arg Ala Val Ser Asp Thr Lys Lys
 210 215 220

Ala Val Lys Tyr Gln Ser Lys Ala Arg Arg Lys Lys Ile Met Ile Ile
 225 230 235 240

Ile Cys Cys Val Ile Leu Gly Ile Val Ile Ala Ser Thr Val Gly Gly
 245 250 255

Ile Phe Ala

<210> 26

<211> 288

<212> PRT

<213> Homo sapiens

<400> 26

Met Lys Asp Arg Thr Gln Val Leu Arg Thr Arg Arg Asn Ser Asp Asp
 1 5 10 15
 Lys Glu Glu Val Val His Val Asp Arg Asp His Phe Met Asp Glu Phe
 20 25 30
 Phe Glu Gln Glu Glu Ile Arg Gly Cys Ile Glu Lys Leu Ser Glu
 35 40 45
 Asp Val Glu Gln Val Lys Gln His Ser Ala Ile Leu Ala Ala Pro
 50 55 60
 Asn Pro Asp Glu Arg Thr Lys Gln Glu Leu Glu Asp Leu Thr Ala Asp
 65 70 75 80
 Ile Lys Lys Thr Ala Asn Lys Val Arg Ser Lys Leu Lys Ala Ile Glu
 85 90 95
 Gln Ser Ile Glu Gln Glu Gly Ser Thr Ala Pro Arg Pro Ile Leu
 100 105 110
 Arg Ile Arg Lys Thr Gln His Ser Thr Leu Ser Arg Lys Phe Val Glu
 115 120 125
 Val Met Thr Glu Tyr Asn Ala Thr Gln Ser Lys Tyr Arg Asp Arg Cys
 130 135 140
 Lys Asp Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly Arg Thr Thr Thr
 145 150 155 160
 Asn Glu Glu Leu Glu Asp Met Leu Glu Ser Gly Lys Leu Pro Ile Phe
 165 170 175
 Thr Asp Asp Ile Lys Met Asp Ser Gln Met Thr Lys Gln Ala Leu Asn
 180 185 190
 Glu Ile Glu Thr Arg His Asn Glu Ile Ile Lys Leu Glu Thr Ser Ile
 195 200 205
 Arg Glu Leu His Asp Met Phe Val Asp Met Ala Met Leu Val Glu Ser
 210 215 220
 Gln Gly Glu Met Ile Asp Arg Ile Glu Tyr Asn Val Glu His Ser Val
 225 230 235 240
 Asp Tyr Val Glu Arg Ala Val Ser Asp Thr Lys Lys Ala Val Lys Tyr
 245 250 255
 Gln Ser Lys Ala Arg Arg Lys Lys Ile Ile Ile Ile Cys Cys Val
 260 265 270
 Val Leu Gly Val Val Leu Ala Ser Ser Ile Gly Cys Thr Leu Gly Leu
 275 280 285
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 <213> Drosophila melanogaster

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Glu Glu Glu Thr Glu Val Ala Val Asn Val Asp Gly His Asp Ser Tyr
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Met Asp Asp Phe Phe Ala Gln Val Glu Glu Ile Arg Gly Met Ile Asp
 35 40 45

Lys Val Gln Asp Asn Val Glu Glu Val Lys Lys Lys His Ser Ala Ile
 50 55 60

Leu Ser Ala Pro Gln Thr Asp Glu Lys Thr Lys Gln Glu Leu Glu Asp
 65 70 75 80

Leu Met Ala Asp Ile Lys Lys Asn Ala Asn Arg Val Arg Gly Lys Leu
 85 90 95

Lys Gly Ile Glu Gln Asn Ile Glu Gln Glu Glu Gln Gln Asn Lys Ser
 100 105 110

Ser Ala Asp Leu Arg Ile Arg Lys Thr Gln His Ser Thr Leu Ser Arg
 115 120 125

Lys Phe Val Glu Val Met Thr Glu Tyr Asn Arg Thr Gln Thr Asp Tyr
 130 135 140

Arg Glu Arg Cys Lys Gly Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly
 145 150 155 160

Arg Pro Thr Asn Asp Asp Glu Leu Glu Lys Met Leu Glu Glu Gly Asn
 165 170 175

Ser Ser Val Phe Thr Gln Gly Ile Ile Met Glu Thr Gln Gln Ala Lys
 180 185 190

Gln Thr Leu Ala Asp Ile Glu Ala Arg His Gln Asp Ile Met Lys Leu
 195 200 205

Glu Thr Ser Ile Lys Glu Leu His Asp Met Phe Met Asp Met Ala Met
 210 215 220

Leu Val Glu Ser Gln Gly Glu Met Ile Asp Arg Ile Glu Tyr His Val
 225 230 235 240

Glu His Ala Met Asp Tyr Val Gln Thr Ala Thr Gln Asp Thr Lys Lys
 245 250 255

Ala Leu Lys Tyr Gln Ser Lys Ala Arg Arg Lys Lys Ile Met Ile Leu
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Tyr Phe Met
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Leu Gln Val Ala Arg Lys
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Thr Lys Lys Ala Leu Lys
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<400> 31

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Thr Asn Lys Ala Val Lys
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<400> 34

Gly Cys Gly Pro Gly
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Val Leu Val Glu Ser Gln Gly Ala Gln
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Val Met Val Glu Ser Gln Gly Glu Gln
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Leu Glu Asn Ser Ile Arg Glu Leu His Asp Met Phe Met Asp Met Ala
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Met Leu Val Glu Ser Gln Gly Glu Met
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<400> 38

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19

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Cys Gly Pro Gly Ser Ser Ser Asp Arg Thr Arg Thr Ser
1 5 10